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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/576,964

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Masatoshi Okazaki

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EXAMINER

LUKS, JEREMY AUSTIN

ART UNIT

PAPER NUMBER

2837

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/576,964	Applicant(s) OKAZAKI ET AL.	
	Examiner JEREMY LUKS	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 33-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/25/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On Page 2, Line 4, and Page 4, Line 21, Applicant has misspelled the word *prior art* as “prier art”. Appropriate correction is required.

Claim Objections

2. Claim 6 is objected to because of the following informalities: Applicant has misspelled the word *kraft* as “craft.” It is well know that Kraft pulp is spelled with a K. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4-7, 13, 15, 16, 22, 24, 25 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizone (4,753,969). Mizone teaches electronic equipment comprising a speaker (See abstract), wherein the speaker including a diaphragm and a dust cap (Col. 8, Lines 54-57), and the diaphragm and the dust cap are injection-molded products (Col. 4, Lines 55-58) made of a mixture containing a resin material and a fiber material (Col 2-4, Examples 1-5 and Prior Art 1 all include an injection molded fiber (carbon fiber or kraft pulp) and resin material); wherein the resin

material is one of polypropylene (Col. 4, Lines 11-14); wherein the fiber material contains at least one of wood fiber kraft pulp (Col. 4, Lines 5-8); wherein the mixture is added with reinforcement (Col 2-3, Examples 1-5 include a hardener, or reinforcement material).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 8-12, 17-21, 26-30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizone (4,753,969). Mizone is relied upon for the reasons and disclosures set forth above. Mizone fails to teach wherein the mixture contains 5% to 70% in weight of the fiber material; wherein the fiber material has a fiber length of 0.2 mm to 20 mm; wherein one of the diaphragm and the dust cap is black or natural color; wherein one of the diaphragm and the dust cap includes the resin material and the fiber material, which are different in color from each other; wherein one of the diaphragm and the dust cap includes the resin material, which is transparent or semi-transparent; and the electronic equipment of being equipment mounted on a car. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wherein the mixture contains 5% to 70% in weight of the fiber material, and wherein the fiber material has a fiber length of 0.2 mm to 20 mm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering

the optimum or working range involves only routine skill in the art. In re Aller, 105 USPQ 233. Further, A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955). It has also been held that discovering the optimum value of a result effective variable involves only routine skill in the Art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide wherein one of the diaphragm and the dust cap is black or natural color; wherein one of the diaphragm and the dust cap includes the resin material and the fiber material, which are different in color from each other; wherein one of the diaphragm and the dust cap includes the resin material, which is transparent or semi-transparent, since the courts have stated that matters relating to ornamentation only which have no mechanical function cannot be relied upon to patentably distinguish the claimed invention from the prior art. *In re Seid*, 161 F.2d 229, 73 USPQ 431 (CCPA 1947). Regarding mounting the speaker device on a car, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. If the prior art structure is capable of performing the intended use, then it meets the claim. *Ex Parte Masham*, 2 USPQ F.2d 1647 (1987). Further, the Examiner considers it well known to mount an electronic speaker device on or in a car.

5. Claims 3, 14 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mizone (4,753,969) as applied to claims 1, 13 and 22 above, and further in view of

Umetsu (5,804,634). Mizone is relied upon for the reasons and disclosures set forth above. Mizone further teaches a resin material (Col 2-4, Examples 1-5 and Prior Art 1-2 all include a resin material). Mizone fails to teach wherein the resin material is a crystalline olefin resin or an amorphous olefin resin. Umetsu teaches using a crystalline olefin resin in a molded product, such as a speaker (Col. 11, Lines 35-47). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Mizone, with the apparatus of Umetsu to give the speaker balanced rigidity and toughness.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent arts of record relating to speakers, speaker-use diaphragms, dust caps, production methods and production devices for them, are disclosed in the PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeremy Luks/
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